

Application Serial No. 10/589,546
Reply to Office Action of October 14, 2008MAR 10 2009 PATENT
Docket: CU-5016Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-15 (canceled)

Claim 16. (Currently Amended) A corundum crystal formed body comprising a platinum base material and a corundum crystal portion formed directly on the platinum base material, wherein the corundum crystal is colorless.

Claim 17. (Previously Presented) The corundum crystal formed body according to claim 16, wherein the corundum crystal portion comprises a corundum crystal having at least one crystal face selected from the group consisting of a {113} face, a {012} face, a {104} face, a {110} face, a {101} face, a {116} face, a {211} face, a {122} face, a {214} face, a {100} face, a {125} face, a {223} face, a {131} face, and a {312} face.

Claim 18. (Previously Presented) The corundum crystal formed body according to claim 16, wherein the corundum crystal portion comprises a corundum crystal having a dominant crystal face other than a {001} face.

Claim 19. (Previously Presented) The corundum crystal formed body according to claim 17, wherein the corundum crystal is derived from a crystal having a hexagonally dipyramidal shape.

Claim 20. (Previously Presented) The corundum crystal formed body according to claim 18, wherein the corundum crystal is derived from a crystal having a hexagonally dipyramidal shape.

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Claim 21. (canceled)

Claim 22. (canceled)

Claim 23. (canceled)

Claim 24. (canceled)

Claim 25. (Previously Presented) A process for producing a corundum crystal formed body, wherein a corundum crystal is formed on a platinum base material by a flux evaporation method of heating a sample containing a raw material and a flux to precipitate a crystal and grow the crystal by use of flux evaporation as driving force.

Claim 26. (Previously Presented) The process for producing a corundum crystal formed body according to claim 25, wherein the corundum crystal has a hexagonally dipyramidal shape as its base shape.

Claim 27. (Previously Presented) The process for producing a corundum crystal formed body according to claim 25, wherein the flux contains a molybdenum compound.

Claim 28. (Previously Presented) The process for producing a corundum crystal formed body according to claim 26, wherein the flux contains a molybdenum compound.

Claim 29. (Previously Presented) The process for producing a corundum crystal formed body according to claim 27, wherein the molybdenum compound is a molybdenum oxide, or a compound which is heated to generate the molybdenum

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oxide.

Claim 30. (Previously Presented) The process for producing a corundum crystal formed body according to claim 28, wherein the molybdenum compound is a molybdenum oxide, or a compound which is heated to generate the molybdenum oxide.

Claim 31. (Previously Presented) The process for producing a corundum crystal formed body according to claim 27, wherein the flux contains an evaporation inhibitor

Claim 32. (Previously Presented) The process for producing a corundum crystal formed body according to claim 31, wherein the evaporation inhibitor is an alkali metal compound.

Claim 33. (Previously Presented) The process for producing a corundum crystal formed body according to claim 32, wherein the alkali metal compound is an alkali metal oxide, or a compound which is heated to generate the alkali metal oxide.

Claim 34. (Previously Presented) The process for producing a corundum crystal formed body according to claim 33, wherein a mol number of an alkali metal atom in the alkali metal compound is 40% or less by mol of a total mol number of the sample.

Claim 35. (Previously Presented) The process for producing a corundum crystal formed body according to claim 25, wherein a mol number of the raw material is 10% or less by mol of a total mol number of the sample.